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United States Patent [19]**Long et al.**[11] **Patent Number:** **5,686,383**[45] **Date of Patent:** **Nov. 11, 1997**[54] **METHOD OF MAKING A COLOR FILTER ARRAY BY COLORANT TRANSFER AND LAMINATION**[75] **Inventors:** **Michael Edgar Long**, Bloomfield;
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both of N.Y.[73] **Assignee:** **Eastman Kodak Company**, Rochester,
N.Y.[21] **Appl. No.:** **644,760**[22] **Filed:** **May 10, 1996**[51] **Int. Cl.⁶** **B41M 5/035; B41M 5/38**[52] **U.S. Cl.** **503/227; 359/62; 359/67;**
359/68; 359/885; 359/892; 428/195; 428/212;
428/913; 428/914; 430/4; 430/321; 430/322;
430/324[58] **Field of Search** **8/471; 359/885,**
359/62, 67, 68, 892; 428/195, 913, 914,
212; 430/321, 4, 322, 324; 503/227[56] **References Cited****U.S. PATENT DOCUMENTS**

4,081,277 3/1978 Brault et al. 96/38.2

4,743,463 5/1988 Ronn et al. 427/53.1

4,923,860 5/1990 Simons 503/227

4,965,242 10/1990 DeBoer et al. 503/227

5,229,232 7/1993 Longobardi et al. 430/7

Primary Examiner—Bruce H. Hess*Attorney, Agent, or Firm*—Raymond L. Owens[57] **ABSTRACT**

A method for preparing a color filter array element is disclosed which includes coating an image receiving layer on one surface of a thin support, with the thin support being rigid in the horizontal plane. Thereafter, a colored pattern of pixel cells is transferred from a colorant donor sheet onto the image receiving layer. The method further includes laminating to a surface of a rigid, transparent support either the coated surface of the thin, rigid support carrying the colored pattern of pixel cells or the other surface of the thin, rigid support, to thereby form the color filter array element.

15 Claims, 1 Drawing Sheet